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The usual stereotype of Third World military regimes is ultraconservatism combined with military force. In this environment the strength of the state dismantles organizations of popular expression, to restrain real wages, to hold down social reform and mass consumption in the interest of capital accumulation and upper-class income.[1] Based on this image, one would expect these countries' socioeconomic performances to deviate significantly from that of civilian governments. Everything else being equal, conventional wisdom holds that Third World military regimes will have a higher defense burden (in terms of the percentage of GNP allocated to defense) and a larger share of the central government budget allocated to defense. Presumably these factors eventually cause the deterioration of socioeconomic performance.[2]

Surprisingly, quantitative studies have not identified significant differences in socioeconomic performance between military and civilian regimes. In fact, a recent exhaustive study on the subject has concluded that "military control of the government has no discernible effect on our measure of welfare performance."[3]

The purpose of this research note is to examine the debate concerning the military/civilian regime and socioeconomic performance from the perspective of comparative budgetary processes. Do budgetary patterns differ between Third World military and civilian governments? If

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so, do military expenditures have a regime-distinctive impact on socioeconomic expenditures and therefore on the quality of life? Alternatively, is poor socioeconomic performance in many Third World countries simply the result of abnormally high degrees of militarization irrespective of regime type?

Our main finding is that a consistent set of socioeconomic differences exists between Third World military and civilian regimes. These differences result not only from differences in budgetary priorities, but almost as importantly from the manner in which governments mobilize resources for military purposes.

Research Design

The decade up to 1982 is an appropriate period for analysis because it represents the culmination of almost a decade of expanded Third World military expenditures.[4] During this period, Third World governments increased allocations to the military through the use of oil revenues and external borrowing.[5]

With regard to the definition of military/civilian regimes, Ruth Sivard provides an operational approach.[6] Of the 114 countries she classified as *developing*, 56 met one or more of the conditions considered sufficient for being classified as under military control: key political leadership by military officers, existence of a state of martial law, extrajudicial authority exercised by security forces, lack of central political control over large sections of the country that are ruled by official or unofficial security forces, and control by foreign military forces.[7]

Unambiguous measures of the *quality of life* are difficult to derive. One standard approach, the physical quality of life index adopted by William Dixon and Bruce Moon in a related study has come under severe criticism in recent years.[8] This index is arbitrarily computed with equal weight given to its principal elements.[9] The same sort of problem exists in deriving a measure of the military burden. One often gets significantly different rankings of countries in terms of military spending, depending on whether one defines defense expenditures as a share of GNP, of per capita expenditures, or of central government budgetary expenditures.

An objective solution to both problems is to create their respective indexes through the application of a maximum-likelihood factor analysis.[10] An additional advantage of this method is that it creates largely uncorrelated[11] measures of other relevant variables that can be used in further regression analysis.

Results

Beginning with a data set of 59 countries (table 1) and 21 variables depicting various measures of socioeconomic development, economic performance, and military expenditures,[12] the factor analysis identified five major components (table 2):[13]

1. The first factor can be characterized as a general measure of the quality of life. It includes the literacy rate, life expectancy, and the like.
2. The second factor depicts per capita income and the budgetary patterns associated with increases in this measure of development. These involve increased public expenditures on health and education.

Table 1
Militarization Factor Scores: Country Sample

Military Regimes	Factor4	Civilian Regimes	Factor4
Honduras	−0.36	Senegal	−0.11
Indonesia	0.10	Greece	0.31
Sudan	0.06	India	−0.14
South Korea	0.57	Cameroon	−0.57
Rwanda	−0.01	Nigeria	−0.32
Guatemala	−0.24	Costa Rica	−0.96
El Salvador	−0.29	Bolivia	−0.66
Turkey	0.08	Egypt	0.60
Paraguay	0.09	Tunisia	−0.10
Brazil	−0.94	Malawi	0.36
Algeria	−0.75	Singapore	0.40
Philippines	0.02	Yugoslavia	0.06
Libya	−1.03	Spain	−0.64
Colombia	−0.49	Venezuela	−0.63
Thailand	0.08	Mexico	−0.82
Liberia	−0.44	Ecuador	−0.62
Panama	−0.84	Malaysia	0.23
Chile	0.26	Dominican Rep	−0.46
Chad	0.94	Sierra Leone	−0.69
Uruguay	0.17	Ivory Coast	−0.82
Uganda	−0.12	Tanzania	0.12
Ethiopia	2.03	Jamaica	−0.50
Central African Republic	−0.41	Trinidad	−0.92
Ghana	0.66	Zambia	1.38
Bangladesh	0.13	Papua	−0.70
Burma	0.58	Saudi Arabia	1.59
Argentina	−0.62	Kenya	−0.33
Peru	−0.30	Jordan	1.40
North Yemen	1.64	Portugal	−0.16
Haiti	−0.18	Sri Lanka	−0.58

Note: Factor scores are based on oblique factor rotation.

3. The third factor captures the main elements of economic performance—the rates of growth in gross domestic product, investment and private consumption over the 1970–1981 period.
4. The fourth factor depicts the degree of militarization. Here, militarization consists of the average military expenditure share of GNP,[14] the average military expenditure per capita, and the average share of defense in the central government budget.
5. Finally, the fifth factor reflects the extent of external public debt accumulated by 1981. Because the debt crisis of 1982 ended a decade of rapid capital flows to the developing countries, this factor represents the bulk of that debt accumulation process.

Table 2

Oblique Rotated Factor Pattern (Standardized Regression Coefficients)

Variable	Factor1 Quality of Life	Factor2 Social Expenditure	Factor3 Growth	Factor4 Military Expenditure	Factor5 External Debt
Literacy rate	0.99[a]	−0.18	−0.08	0.01	−0.06
Life expectancy	0.90[a]	−0.03	−0.07	0.02	−0.06
% women in university	0.89[a]	−0.13	0.07	0.14	0.01
% school-age population in school	0.70[a]	0.12	0.05	−0.11	0.12
% population with safe water	0.46[a]	0.20	0.00	0.01	0.09
Population per hospital bed	−0.35	−0.19	0.15	0.22	−0.15
Population per physician	−0.76[a]	−0.21	−0.23	0.05	0.02
Population per teacher	−0.78[a]	−0.28	−0.15	0.10	−0.05
Infant mortality	−0.95[a]	0.11	0.12	−0.10	0.14
Education expenditure	−0.04	0.93[a]	0.01	0.20	0.02
GNP per capita	0.03	0.84[a]	0.02	−0.02	−0.18
Health expenditure	0.22	0.52[a]	−0.18	0.02	−0.11
Growth in GNP	0.19	−0.31	0.85[a]	0.05	0.13
Growth in investment	−0.05	0.11	0.83[a]	0.09	−0.12
Growth in consumption	−0.09	0.52	0.67[a]	−0.04	−0.02
Military expenditure per GNP	−0.03	0.24	0.02	0.88[a]	0.11
Military expenditure per budget	−0.12	−0.17	0.20	0.74[a]	−0.17
Military expenditure per population	0.17	0.48	−0.14	0.71[a]	0.11
Debt service per GDP	0.10	0.02	0.05	0.00	0.82[a]
Debt per GDP	−0.09	−0.13	−0.10	0.14	0.71[a]
Debt service per exports	0.06	−0.09	0.03	−0.09	0.66[a]
Eigenvalue	8.47	3.56	2.03	1.73	1.22
Proportion of variance explained	46.90	19.70	11.24	9.56	6.79
Total variance explained	46.90	66.60	77.84	89.08	95.87

[a]High Factor Loading

Sources: Ruth Sivard, *World Military and Social Expenditures* (Washington, D. C.; World Priorities, 1983) and *World Development Report* (Washington, D.C.: World Bank, various years).

Table 3

Factor Means (Factor Scores)

Country Grouping	Factor1 Quality of Life	Factor2 Social Expenditure	Factor3 Growth	Factor4 Military Expenditure	Factor5 External Debt
Military Regimes	−0.21	−0.29	−0.04	−0.03	−0.21
Civilian Regimes	0.21	0.29	0.04	0.03	0.21
Moderate Militarization					
(factor4>0)	−0.07	−0.08	0.25	0.73	−0.24
(factor4<0)	0.06	0.06	−0.18	−0.52	0.18
High Militarization					
(factor4>0.25)	−0.30	0.14	0.10	1.22	−0.12
(factor4<0.25)	0.09	−0.04	−0.03	−0.37	0.04
Low Militarization					
(factor4> −0.25)	−0.13	−0.14	0.16	0.54	−0.27
(factor4< −0.25)	0.15	0.16	−0.18	−0.62	0.31

Notes: Country factor scores are obtained from factor analysis presented in Table 1. Militarization groupings are based on countries above and below specified Factor4 (the military expenditure factor) scores.

Since the oblique factor analysis generated relatively uncorrelated factors,[15] they were selected as variables for the regression analysis below. The factor scores[16] (table 3) suggest that important differences exist between military and civilian regimes: military regimes score consistently below their civilian counterparts on all five dimensions. The largest difference between regimes occurs in health and education expenditures per capita (Factor2). Somewhat surprisingly, military and civilian regimes differ the least on the military-burden dimension (Factor4).

A basis of comparison is provided by the factor means for several other groupings of countries, as shown in table 2. These groupings reflect simple arbitrary[17] cut-offs of the factor scores on the military-expenditure dimension (Factor4). High militarization (Factor4 country scores > 0.00) are associated with lower quality of life, depressed social expenditures, and lower external debt (but with higher rates of growth). Very high levels of militarization (Factor4 country scores > 0.25) are, however, associated with above-average expenditures on social programs. At the same time these countries experience greatly depressed quality of life scores.

In terms of the impact of military expenditures in divergent regime environments, some distinct patterns are apparent[18] (see table 4):

- Increased militarization (as depicted by Factor4) in military regimes is usually characterized by a deterioration in the general

quality of life (Factor1). It is also associated with reduced levels of social expenditures per capita (Factor2).

- Civilian regimes, on the other hand, do not appear to suffer declines in the quality of life stemming from increased defense burdens. In fact, these regimes appear to increase social expenditures per capita with increases in the defense burden.

These results are not simply a reflection of the somewhat high levels

Table 4

Military Expenditures by Regime Type and the Quality of Life and Social Expenditures (Standardized Regression Coefficients)

Military Regimes

1. Factor1 = −0.51 Factor4 + 0.08 Factor2
   (−2.61) (−0.39)
   df = 29; F = 6.00; r2 = 0.307
2. Factor1 = −0.55 Factor4 + 0.31 Factor3
   (−3.71) (2.09)
   df = 29; F = 9.02; r2 = 0.401
3. Factor1 = −0.43 Factor4 + 0.29 Factor5
   (−2.61) (1.74)
   df = 29; F = 8.05; r2 = 0.373
4. Factor2 = −0.57 Factor4 + 0.01 Factor3
   (−3.28) (0.01)
   df = 29; F = 7.51; r2 = 0.357
5. Factor2 = −0.57 Factor4 + 0.01 Factor5
   (−3.28) (0.01)
   df = 29; F = 6.46; r2 = 0.324

Civilian Regimes

6. Factor1 = 0.01 Factor4 + 0.23 Factor2
   (0.03) (1.09)
   df = 29; F = 0.79; r2 = 0.05
7. Factor1 = 0.11 Factor4 − 0.17 Factor3
   (0.61) (−0.88)
   df = 29; F = 0.57; r2 = 0.04
8. Factor1 = 0.12 Factor 4 − 0.06 Factor5
   (0.62) (−0.29)
   df = 29; F = 0.22; r2 = 0.02
9. Factor2 = 0.46 Factor4 + 0.25 Factor3
   (2.79) (1.49)
   df = 29; F = 5.02; r2 = 0.271
10. Factor2 = 0.05 Factor4 − 0.32 Factor5
    (3.11) (−2.00)
    df = 29; F = 6.17; r2 = 0.314

Notes: Limited Information Maximum Likelihood Estimates. ( ) = t statistic; df = degrees of freedom; F = F statistic; r2 = coefficient of determination. The factors are those identified in Tables 2 and 3.

of militarization experienced by military regimes. As noted above (table 3), compared to their civilian counterparts, military regimes do not as a group have higher levels of military expenditures. In addition, the results obtained (table 4) by performing the same set of regressions on country groupings based on high and low levels of military expenditures (Factor4 country scores above and below zero) show (table 5) no real pattern between militarization and declines in the quality of life.

More specifically, countries with somewhat high levels of militari-

Table 5

Military Expenditures by Degree of Militarization and the Quality of Life and Social Expenditures (Standardized regression coefficients)

Relatively High Militarization (Factor4 Country Scores>0.00)

1. Factor1 = −0.29 Factor4 + 0.48 Factor2
   (1.39) (2.30)
   df = 24; F = 2.75; r2 = 0.200
2. Factor1 = −0.05 Factor4 + 0.17 Factor3
   (−0.23) (0.78)
   df = 24; F = 0.39; r2 = 0.034
3. Factor1 = −0.24 Factor4 + 0.37 Factor3
   (1.01) (1.70)
   df = 24; F = 1.55; r2 = 0.122
4. Factor2 = 0.50 Factor4 + 0.33 Factor3
   (2.72) (1.81)
   df = 24; F = 4.46; r2 = 0.288
5. Factor2 = 0.51 Factor4 − 0.21 Factor5
   (2.49) (−1.02)
   df = 24; F = 3.09; r2 = 0.219

Relatively Low Militarization (Factor4 Country Scores < 0.00)

6. Factor1 = 0.01 Factor4 + 0.14 Factor2
   (−1.30) (0.70)
   df = 34; F = 2.41; r2 = 0.131
7. Factor1 = −0.34 Factor4 + 0.01 Factor3
   (−2.03) (0.85)
   df = 34; F = 2.14; r2 = 0.118
8. Factor1 = −0.30 Factor4 + 0.15 Factor5
   (−1.78) (0.87)
   df = 34; F = 2.57; r2 = 0.138
9. Factor2 = −0.55 Factor4 + 0.18 Factor3
   (−3.83) (1.26)
   df = 34; F = 9.18; r2 = 0.365
10. Factor2 = −0.63 Factor4 − 0.19 Factor5
    (−4.32) (−1.32)
    df = 34; F = 9.28; r2 = 0.367

Notes: Limited Information Maximum Likelihood Estimates. ( ) = t statistic; df = degrees of freedom; F = F statistic; r2 = coefficient of determination.

zation (Factor4 scores > 0.00) show no statistically significant relationship between their military burden and their general quality of life. Instead, these countries can find the resources not only to increase health and educational (social) expenditures per capita but also to increase their military expenditures as well. In contrast, countries with low levels of militarization (Factor4 scores < 0.00) experience lower levels of health and educational expenditures during periods of expanded allocation to the military.

In part, these differences in defense and social expenditure patterns can be explained by the extent to which governments have relied on external public debt to finance their public budgets (table 6). External public debt does not appear to be associated with the budgetary patterns in civilian regimes. However, countries with high levels of militarization

Table 6

Impact of Military and Social Expenditures on External Public Debt (Standardized Regression Coefficients)

Military Regimes
1. Factor5 = −0.40 Factor4 + 0.01 Factor2
(−1.89) (0.01)
df = 29; F = 2.64; r2 = 0.164

Civilian Regimes
2. Factor5 = 0.31 Factor4 + 0.06 Factor2
(1.52) (−2.01)
df = 29; F = 2.24; r2 = 0.142

Moderate Militarization (Factor4 Country Scores > −0.25)
3. Factor5 = 0.41 Factor4 − 0.11 Factor2
(2.13) (−0.54)
df = 31; F = 2.35; r2 = 0.140

Very Low Militarization (Factor4 Country Scores > −0.25)
4. Factor5 = −0.36 Factor4 − 0.40 Factor2
(−1.58) (−1.74)
df = 27; F = 1.76; r2 = 0.123

Relatively High Militarization (Factor4 Country Scores >0.00)
5. Factor5 = 0.50 Factor4 − 0.21 Factor2
(2.41) (−1.02)
df = 24; F = 2.90; r2 = 0.209

Relatively Low Militarization (Factor4 Country Scores <0.00)
6. Factor5 = −0.43 Factor4 − 0.27 Factor2
(−1.30) (0.70)
df = 34; F = 2.41; r2 = 0.131

Notes: Limited Information Maximum Likelihood Estimates. ( ) = t statistic; df = degrees of freedom; F = F statistic; r2 = coefficient of determination. The factors are those identified in tables 1 and 2.

(table 6, equation 5 versus equation 6) have had their external public debt expanded with increased levels of military expenditures (but not because of increased social expenditures).

Interpretation of Findings

The results for countries with a high degree of militarization and/or civilian regimes are consistent with those found by Robert McKinlay. After analyzing time series data on Third World budgets, he concludes that military expenditures in the Third World seem to have considerable budgetary autonomy.[19] Governments appear to adopt a given level of military commitment largely independent of the budget. The budget is expanded as necessary to incorporate the level of commitment. Evidently, if countries wish to commit themselves to higher levels of military expenditure, government budgetary deficits per se will not constrain this expansion. Because countries seem to adjust their budgets to accommodate the level of military expenditure, this form of expenditure does not seem detrimental to education or health expenditures.

McKinlay's results do not appear to account fully for the manner in which governments allocate resources in countries with military regimes and/or low levels of militarization. At least in military regimes, a more complex process appears to be present. In these countries, not only the budgetary patterns themselves but also the means in which the public sector mobilizes resources appear to influence the quality of life.

One explanation for these differences in military/civilian government budgetary behavior and associated impacts may stem from dissimilarities recently identified in their respective rent-seeking behavior.[20] Military regimes appear to be in somewhat better control of defense expenditures than are their civilian counterparts. Specifically, allocations to defense in these regimes do not produce such generally adverse economic effects as lower rates of investment, higher growth in imports, declines in the productivity of investment, and high rates of inflation found in civilian regimes. While both military and civilian regimes experience rent-seeking behavior, different groups are favored in each regime type, with civilian regimes favoring urban consumers and military regimes favoring industrial groups.

These two contrasting styles of economic management appear to produce different environments: defense expenditures tend to have a positive general impact on growth in military regimes and perhaps a negative impact on growth in civilian regimes. While conjectural at this point, military regimes may, by shifting income from the agricultural

sector, be able to finance defense expenditures while preserving the income levels of key economic (higher-income) groups during periods of military buildup. Civilian regimes, having less control over rent-seeking groups, do not appear able to combine rent-seeking activity and military expenditures in a manner conducive to overall growth.

More specifically, the impact of military expenditures on socioeconomic welfare in the Third World may not relate to the budgetary priorities per se but instead to the manner in which governments mobilize these resources. Military regimes and countries with low degrees of militarization appear less likely to mobilize additional resources for expanded military expenditure through foreign borrowing. In contrast to civilian governments having low degrees of militarization, military regimes appear capable of, and inclined toward, diverting resources to defense from lower-income groups.

Implied in this analysis is a worsening income distribution associated with defense expenditures in military regimes. Civilian regimes appear to obtain a more equal distribution of income stemming from increased expenditures. The net result should be decreases in the general quality of life in military regimes. In contrast, civilian regimes may experience a neutral or positive impact.

Conclusions

In a recent study[21] Miles Wolpin argues that over the past two decades disproportionately large allocations to the military have lowered the standard of living in the Third World:

> In the past two decades, developing countries have increased their share of world military spending considerably. If these resources, or even just some of them were to be diverted from the military sphere to welfare programs, economic development and so on, there would be a considerable improvement in living standards for the mass of population.

Wolpin goes on to argue that there is a positive relationship between the level of a regime's military spending and the degree of internal repression it inflicts.

The results presented in tables 4, 5, and 6 are somewhat at odds with this image. For one thing, military regimes do not necessarily spend more on defense, and in fact they are likely to spend less. More important, it appears that a consistent set of socioeconomic differences

exists with regard to the impact of military expenditures. However, these differences tend to be more closely associated with differences in regime type than with differences in the level of militarization per se.

This finding and the fact that military regimes (but not highly militarized countries in general) systematically reduce health and education expenditures with increased defense burdens suggest that the most productive area for future research may be comparative military/civilian budgetary processes. Here an examination should include resource mobilization as well as budgetary priorities. Further testing of potential affects of military expenditures on the socioeconomic environment appears to be a less fruitful area of research.

In this regard, it appears that a potentially productive area of research may be found in a closer examination of the process of rent creation in military regimes.[22] Tentative findings suggest that military regimes tend to finance increased levels of defense expenditures through the creation of rents for certain elite urban groups.[23] These rents come at the general expense of workers in the rural sector (thus accounting for the observed negative impact on socioeconomic development).

In contrast, civilian regimes having less control over rent-seeking groups do not appear able to resort to income shifts to mobilize resources for increased allocation to the military. Instead, civilian regimes appear to be under pressure to increase allocations for both defense and socioeconomic programs. This process may result in the observed positive relationship between socioeconomic expenditures and defense. Given the inability of civilian regimes to mobilize resources for defense at the expense of any one major group, (particularly groups at the lower end of the income scale), the general impact of defense expenditures on socioeconomic development may be neutral.

Notes

1. For a recent analysis of this image, see: Robert E. Looney, "Failure of Argentinean Monetarist Experiments, 1976–82," *Scandinavian Journal of Development Alternatives* 6, 4 (December 1987): 143–63; and Robert E. Looney, "The Economic Impact of Rent Seeking and Military Expenditures in the Third World," *American Journal of Economics and Sociology* 48, 1 (January 1989): 11–30.
2. For an excellent survey of the earlier literature on this topic, see Karen Remmer, "Evaluating the Policy Impact of Military Regimes in Latin America," *Latin American Research Review* 13, 1 (1978): 39–54. More recent works are evaluated in William Dixon and Bruce Moon, "The Military Burden and Basic Human Needs," *Journal of Conflict Resolution* 30, 4 (December 1986): 660–684.
3. Dixon and Moon, "The MIlitary Burden," 684.

4. Military expenditures do impact with a fairly long time lag, and in fact their impact tends to increase as the time interval is increased. See Nehama Babin "Military Spending, Economic Growth, and the Time Factor," *Armed Forces & Society* 15, 2 (Winter 1989): 249–262.
5. Cf. Robert E. Looney, "Impact of Military Expenditures on Third World Debt," *Canadian Journal of Development Studies* 8, 1 (1987), pp. 7–26; and Robert E. Looney, "The Influence of Arms Imports on Third World Debt," *Journal of Developing Areas* 23, 2 (January 1989): 221–232.
6. Ruth Sivard, *World Military and Social Expenditures, 1983* (Washington, D.C.: World Priorities, 1983), 11.
7. Since Sivard also provides (for 1980) a comprehensive and comparable data base for 77 Third World countries of both the military burden and 14 varied measures of socioeconomic development, her study provides an ideal data set for the problem at hand. In particular, the overlap of military rule with economic data for the previous decade is fairly close—most countries had long records of military rule: the average was 16 years out of the prior 20.
8. Dixon and Moon, "The Military Burden."
9. Walton Wilford, "Some Observations on Public Enterprise and the Quality of Life," in *Public Enterprise: Current Issues in the North American and Caribbean Countries*, ed. Edgar Ortiz (Mexico City: Centro de investigacion y docencia economicas, 1988), 883.
10. A description of this method is given in David N. Lawley and Alex Maxwell, *Factor Analysis as a Statistical Method* 2d ed. (London: Butterworths, 1971).
11. If the factor rotations are orthagonal, there is no correlation between the individual dimensions. The oblique rotations estimated in note 15 retain some correlation between the individual factors.
12. No distinction was made between countries producing arms and those without arms industries. Recent research, however, has shown that arms production may significantly alter the impact of a given amount of military expenditures. See, for example, Michael Brzoska, "The Impact of Arms Production in the Third World," *Armed Forces & Society* 15, 4 (Summer 1989): 507–530; and Robert E. Looney, *Third World Military Expenditure and Arms Production* (London: Macmillan, 1988), chap. 4.
13. On the basis of each factor having an eigenvalue greater than one.
14. The difference between GDP and GNP is net factor payments abroad. While these payments were fairly high for several countries, our results were not affected by the definition of income used.
15. On an oblique factor rotation the interfactor correlations were:

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 1	1.00	0.35	•0.11	−0.14	0.24
Factor 2	0.35	1.00	0.21	0.12	0.00
Factor 3	0.11	0.21	1.00	0.01	−0.07
Factor 4	−0.14	0.12	0.01	1.00	−0.05
Factor 5	0.24	0.00	−0.07	−0.05	1.00

16. These are constructed to have a mean of zero, so that a positive score for an individual country indicates that it has greater than average attainment of the dimension depicted by that factor. Since there were an identical number of countries (29) in both the civilian and military groups, the factor scores for each group are the mirror images of those of the other group.

17. 0.25 was selected simply because larger values such as 0.50 tended to reduce the sample size of one of the regime to an extent that statistical analysis was impossible. It should be noted that within a fairly wide range around 0.25 there were no significantly different findings than those reported here.

18. The regressions are undertaken on a pair-wise basis simply to demonstrate the robustness of the military expenditure term. Alternative formulations such as: Factor1 = a1 + b1Factor2 + b3Factor3 + b4Factor5; and Factor2 = a2 + b1Factor3 + b2Factor4 + b3Factor5 did not generate findings significantly different from the ones reported here.

19. Robert McKinlay, *Third World Military Expenditure: Determinants and Implications* (London: Francis Pinter, 1989), 38–39.

20. Robert E. Looney, "The Economic Impact of Rent Seeking and Military Expenditures in the Third World," *The American Journal of Economics and Sociology* 48, 1 (January 1989): 27.

21. Miles Wolpin, *Militarization, Internal Repression and Social Welfare in the Third World* (London: Croom Helm, 1986), p. 87.

22. An excellent definition of rents and rent seeking is given in Erich Weede, "Rent Seeking, Military Participation, and Economic Performance in LDCs," *Journal of Conflict Resolution* 30, 2 (June 1986): 291–314.

23. Looney, "The Economic Impact of Rent Seeking," 11–30.